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Containerized Seedling Production Statistics for Ontario, 1984

J. B. Scarratt

Published under the auspices of the Container Stock Working Group of the Canada-Ontario Joint Forestry Research Committee

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CONTAINERIZED SEEDLING PRODUCTION STATISTICS FOR ONTARIO, 1984

J.B. SCARRATT

under the auspices of the

CONTAINER STOCK WORKING GROUP OF THE

CANADA-ONTARIO JOINT FORESTRY RESEARCH COMMITTEE

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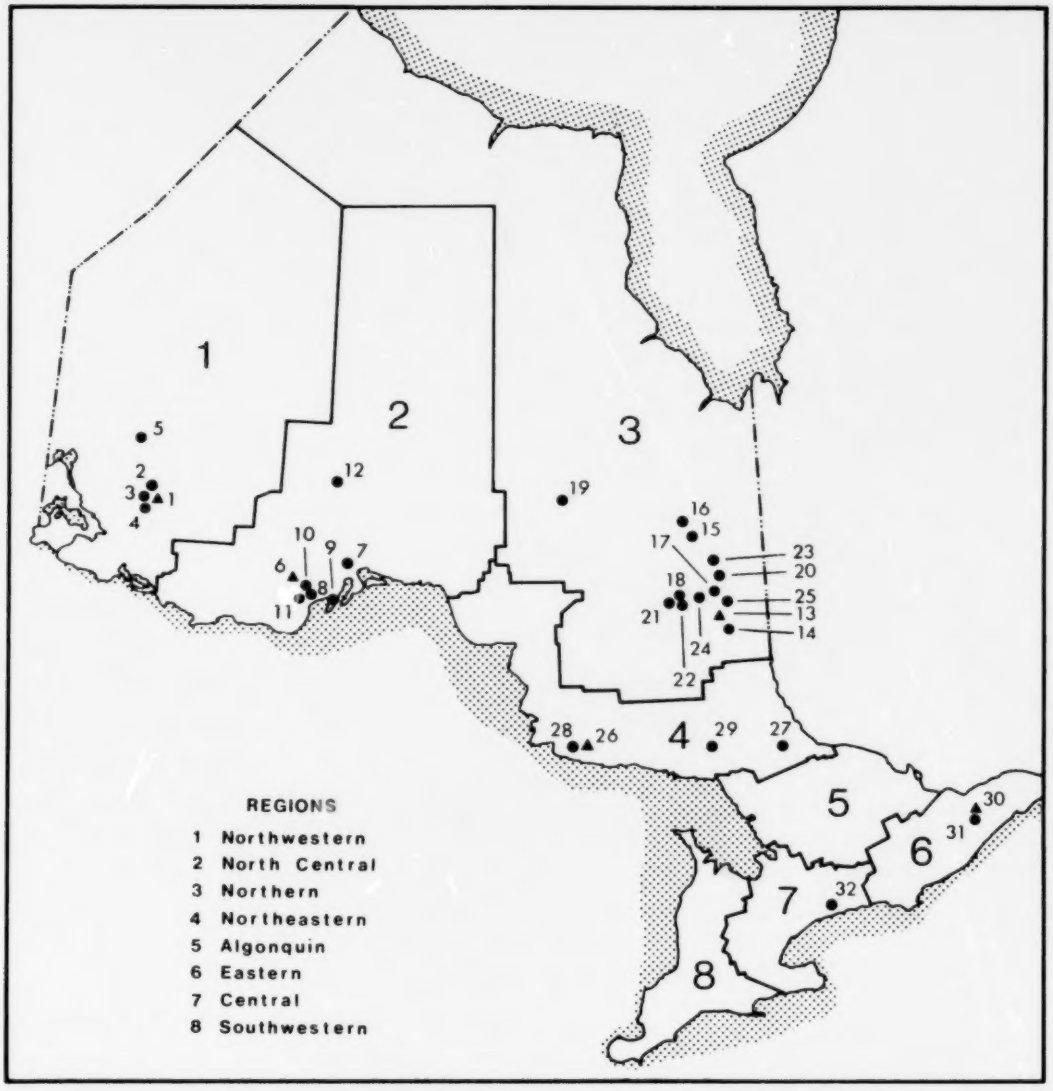
ABSTRACT

In Ontario, six provincial crown and 26 private sector nurseries produced 81.5 million containerized tree seedlings for the reforestation program during 1984. This represents 57% of all planting stock produced that year. Private sector nurseries accounted for 86% of container production, or 70.4 million seedlings. Most (80%) of this private production was centered in the four northern regions of the province. Species most commonly grown in containers were jack pine and black spruce, which accounted for 49% and 47% of total production, respectively. Statistics are presented to contrast production of containerized and bare-root stock by administrative region, nursery, and species.

RÉSUMÉ

En 1984, six pépinières provinciales et 26 pépinières privées de l'Ontario ont produit 81.5 millions de semis d'arbres en récipients destinés au reboisement, ce qui représente, pour l'année, 57% de la production de matériel de plantation de toute nature. La production des pépinières privées comptait pour 86% du total (70.4 millions de semis). La plus grande partie (80%) de la production privée était centrée dans les quatre régions du nord de la province. Les espèces les plus cultivées en récipients étaient le pin gris et l'épinette noire, 49 et 47%, respectivement, du total. Les statistiques sont présentées de façon à permettre la comparaison de la production de plants en récipients et de plants à racines nues selon la région administrative, la pépinière et l'espèce.



Frontispiece. Container production nurseries in Ontario, 1984. (Large numbers indicate administrative regions; small numbers indicate locations of nurseries listed in Table 4: ▲ - provincial crown nurseries, ● - private sector nurseries.)

TABLE OF CONTENTS

	Page
PRODUCTION HIGHLIGHTS	1
EXPLANATORY NOTES ON TABLES	4
Table 1. Summary of greenhouse capacities (m^2) for containerized seedling production by region and ownership category, 1984	7
Table 2. Summary of container system use (cavities sown) by region, 1984	8
Table 3. Summary of container system use (shippable seedlings produced) by region, 1984	8
Table 4. Container production nurseries by region:	
Northwestern Region	9
North Central Region	11
Northern Region	13
Northeastern Region	18
Eastern Region	19
Central Region	20
Table 5. Summary of planting stock production, all sources, for calendar year 1984 by region and type ('000 shippable seedlings)	21
Table 6. Summary of planting stock production for calendar year 1984 by region, type and source ('000 shippable seedlings)	22
Table 7. Summary of planting stock production, all sources, for calendar year 1984 by region, type and species ('000 shippable seedlings)	23

Cover photo: Counting needle primordia on black spruce container stock (photo courtesy of Ray Hong, Ontario Ministry of Natural Resources, Kirkland Lake).

PRODUCTION HIGHLIGHTS

This is the third in a series of annual reports summarizing containerized tree seedling production statistics for the province of Ontario. Previous reports have documented a sharp increase in the numbers of containerized seedlings produced for provincial reforestation programs since the beginning of the decade. At the same time, an increasingly larger proportion of those seedlings has been grown in private sector nurseries under contract to the Ontario Ministry of Natural Resources (OMNR). For the last report year, 1983, total production of container stock amounted to 54.7 million seedlings, of which 76% was produced in 23 private greenhouses.

Total planting stock production, of all stock types, continued to show a steady rise in 1984 (Fig. 1), reaching a record 142.8 million trees. This represents an increase of 18.5% over the previous year's figure, and more than a 55% increase since 1982. Despite the magnitude of the increase, production of bare-root stock actually declined slightly in 1984, and for the first time was surpassed by output of container stock. The latter, at 81.5 million seedlings, was almost 50% greater than in 1983, and accounted for 57% of total planting stock production (up from 45% in 1983). These are overall averages for the province as a whole; it will be noted that the proportion of containers in the four northern regions (Northwestern, North Central, Northern, Northeastern) (Table 5), ranged from 63% to 85% of total planting stock production.

In line with the policy of privatizing containerized seedling production, 26 private nurseries with a total heated greenhouse floorspace of approximately 56,000 m^2 produced 70.4 million seedlings. This represents a 69% increase in private output over the previous year, giving the private sector an

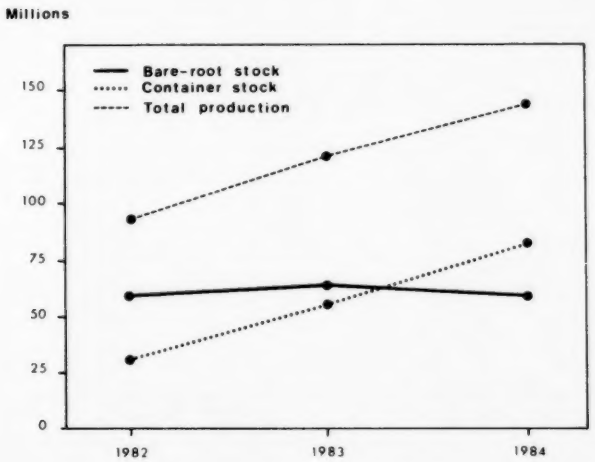


Figure 1. Planting stock production for the years 1982 to 1984 (millions of seedlings).

86% share of container production (Fig. 2). As will be noted from Table 6, most (80%) of this private production was centered in the Northern and North Central regions. Container production at OMNR nurseries continued to decline, both in terms of numbers of seedlings (11 million) and as a proportion of the total (14%, Fig. 2).

The fact that the bulk of container planting takes place in the four northern regions of the province is reflected in the statistics for container production by species (Table 7). In 1984 the two main species grown were jack pine and black spruce, which accounted for 49% and 47% of total container production, respectively. The next closest species, in order of magnitude, was white pine at 1.5%.

The pattern of container use changed little during the period 1982-1984 (Fig. 3), the Japanese paperpot still being the most widely used container. Although employed only in the North Central, Northern and Northeastern regions, the paperpot system accounted for 80% of all container stock grown in the province in 1984.

Most of the data for this report were supplied by OMNR regional members of the Container Stock Working Group of the Canada-Ontario Joint Forestry Research Committee. Planting stock production data for the Central and Southwestern regions were provided by the respective provincial nursery superintendents. The assistance of all contributors is gratefully acknowledged.

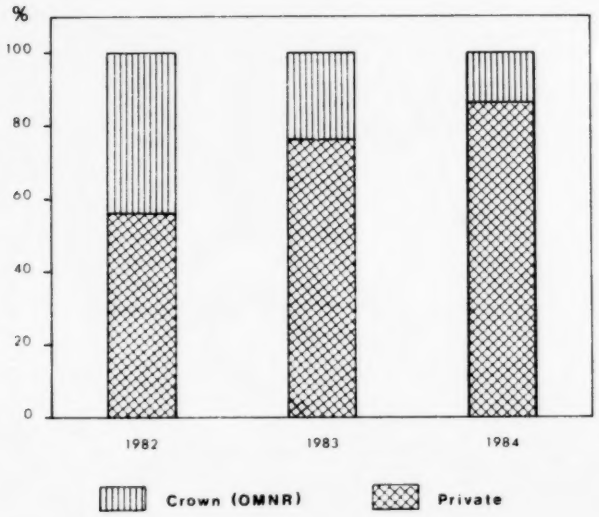


Figure 2. Distribution of container stock production between crown and private nurseries, 1982-1984.

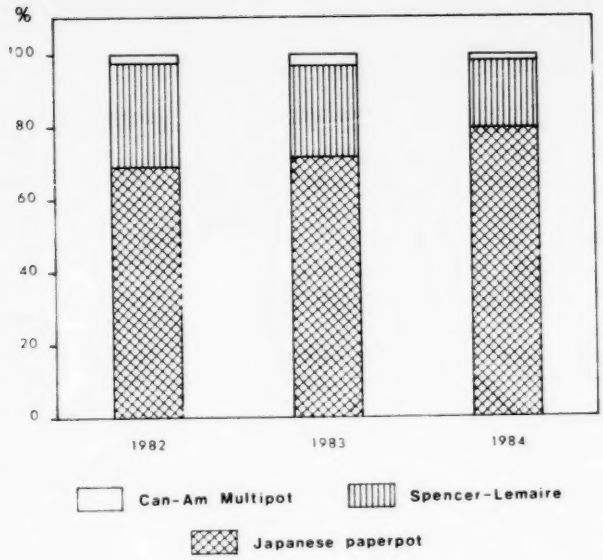


Figure 3. Container system use, 1982-1984 (as a percentage of total container stock production).

EXPLANATORY NOTES ON TABLES

The format is identical with that of the 1983 report.

1. All data are for calendar year 1984. Container stock production is presented in terms of the total number of cavities sown and numbers of shippable seedlings produced[1]. The latter includes seedlings produced in 1984 for shipping in the current year (1984) or for overwintering and shipping the following spring (1985). It does not include overwintered seedlings shipped in the spring of 1984. Data for bare-root production include only seedlings shipped during calendar year 1984.

2. Data for container production exclude containerized seedlings grown for use in the production of accelerated bare-root transplant stock.

3. Accelerated bare-root transplant data (Accel. transplants; tables 5-7) include production from both containerized and bare-root seedlings.

4. **NURSERY OWNERSHIP**

   All container production reported was carried out in provincial crown (i.e., OMNR) or private sector nurseries under contract to OMNR. Only those private nurseries with seedling production contracts are reported here. There were no container nurseries operated by the forest industry in Ontario in 1984.

5. **GREENHOUSE TYPE**

   i. **Heated houses** with conventional heating systems.

   ii. **Unheated houses** with assisted cooling (e.g., thermostatically controlled vents and extractor fans, or other mechanical cooling devices).

   iii. **Shelterhouses** - unheated houses or other protective structures with only passive cooling (i.e., no mechanical cooling devices). In 1984, no nursery reported using such structures in the production of container stock.

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[1] The use of "shippable seedlings produced" rather than "seedlings shipped" is determined by the desire for an accurate portrayal of container nursery production on a crop-year basis. This approach avoids the problem of seedlings produced to acceptable standards but for some reason not shipped (inherent in the reporting of "seedlings shipped"), and serves better to quantify actual nursery productivity in a given year.

6. **TABLE 4 - CONTAINER NURSERY DIRECTORY**

The following information precedes the entry for an individual nursery:

- nursery number (same sequence as on frontispiece map)
- (C) or (P) indicates crown or privately operated nursery, respectively
- mailing address
- name of nursery superintendent or owner
- telephone number
- container system used and percentage of use:

  PP3 - FH308 Japanese paperpot
  PP4 - FH408 Japanese paperpot
  SLF - Spencer-Lemaire "Ferdinand"
  MP1 - Can-Am Multipot 1
  LT - Ray Leach Super "Stubby"

For each entry:

- greenhouse description, in parentheses, follows figure for greenhouse capacity, viz:

  1st letter (greenhouse style)
  F - free standing
  G - gutter connected

  2nd letter (greenhouse cover material)
  f - fiberglass or rigid plastic
  g - glass
  p - polyethylene

  3rd letter (heating method)
  a - forced air/oil
  b - forced air/propane
  c - forced air/natural gas
  d - forced air/gas waste heat
  e - hot water/oil
  f - hot water/propane
  g - hot water/natural gas
  h - hot water/wood

- species abbreviations:

  bS - black spruce
  wS - white spruce
  jP - jack pine
  rP - red pine
  wP - white pine
  sP - Scots pine
  L - larch (tamarack)
  OC - other conifers

- crop schedule:

  This provides an estimate of (1) the percentage of current and overwinter production for each species, *based on cavities sown*, and (2) the average length of production period for each growing regime, calculated on the basis of the number of weeks between sowing and shipping.

Table 1. Summary of greenhouse capacities (m^2) for containerized seedling production by region and ownership category, 1984[a]

Region	OMNR capacity			Private capacity			Total capacity		
	Heated houses	Unheated houses	Shelter-houses	Heated houses	Unheated houses	Shelter-houses	Heated houses	Unheated houses	Shelter-houses
Northwestern	2 230	-	-	5 060	-	-	7 290	-	-
North Central	1 500	-	-	16 611	-	-	18 111	-	-
Northern	4 700	-	-	30 494	-	-	35 194	-	-
Northeastern	4 491	-	-	2 980	-	-	7 471	-	-
Eastern	900	300	1 200	740	280	-	1 640	580	1 200
Central[b]	1 663	-	4 830	-	-	-	1 663	-	4 830
	15 484	300	6 030	55 885	280	-	71 369	580	6 030

[a] Whereas private greenhouses produced only container stock, several OMNR nurseries used their greenhouses principally for cuttings and the production of seedlings for accelerated bare-root stock.

[b] Orono nursery

Table 2. Summary of container system use (cavities sown) by region, 1984.

Region	Spencer-Lemaire	Japanese paperpot	Can-Am Multipot	Other
	('000 cavities sown)			
Northwestern	15 548	-	-	-
North Central	2 880	24 770	320	-
Northern	-	43 462	-	-
Northeastern	-	9 259	-	483
Eastern	-	-	1 065	-
Central	-	-	68[a]	-
	18 428	77 491	1 453	483
% of total	18.8	79.2	1.5	0.5

Table 3. Summary of container system use (shippable seedlings produced) by region, 1984.

Region	Spencer-Lemaire	Japanese paperpot	Can-Am Multipot	Other
	('000 shippable seedlings)			
Northwestern	12 376	-	-	-
North Central	2 520	21 373	280	-
Northern	-	35 662	-	-
Northeastern	-	7 843	-	365
Eastern	-	-	977	-
Central	-	-	62[a]	-
	14 896	64 878	1 319	365
% of total	18.3	79.6	1.6	0.5

[a]Orono nursery

Table 4. Container production nurseries by region.

Greenhouse capacity (m^2) and style				Seedling production ('000 cavities sown)		Seedling production ('000 shippable seedlings)		Crop schedule	
Heated houses	Unheated houses	Shelter-houses		Heated houses	Unheated houses	Heated houses	Unheated houses	Current crop	Over-wintered
NORTHWESTERN REGION									
1(C) DRYDEN TREE NURSERY, ONTARIO MINISTRY OF NATURAL RESOURCES, P.O. BOX 90, WABIGOON, ONTARIO, P0V 2W0									
[Malcolm McIntyre. Tel. (807) 938-6326]									
[SLF-100%]									
2230 (Ffa/b)	-	-	jP	2568	-	2568[a]	-	19/17	81/50
			bS	430	-	430[a]	-	36/16	64/62
				2998	-	2998	-		
2(P) COOK LAKE NURSERIES, RR#1, SITE 28 BOX 20, DRYDEN, ONTARIO, P8N 2Y4									
[Bill Schneider. Tel. (807) 937-5381]									
[SLF-100%]									
668 (Fpb)	-	-	jP	690	-	680	-	100/14	-
			bS	690	-	655	-	-	100/52
				1380	-	1335	-		
3(P) EVERGREEN FARMS, 48 PRINCESS STREET, DRYDEN, ONTARIO, P8N 1C7									
[Charles Queau. Tel. (807) 937-5239]									
[SLF-100%]									
2020 (Fpc)	-	-	jP	2070	-	1900	-	100/14	-
			bS	1265	-	1194	-	-	100/52
				3335	-	3094	-		

[a] All containers restocked to 100%

(cont'd)

Table 4. Container production nurseries by region (cont'd).

Greenhouse capacity (m^2) and style				Seedling production ('000 cavities sown)		Seedling production ('000 shippable seedlings)		Crop schedule	
Heated houses	Unheated houses	Shelter-houses		Heated houses	Unheated houses	Heated houses	Unheated houses	Current crop	Over-wintered
4(P) TAMARAC NURSERIES, RR#2, DRYDEN, ONTARIO, P8N 2Y5									
[David Lick. Tel. (807) 937-6621]									
[SLF-100%]									
722 (Fpe/h)	-	-	jP	1092	-	1050	-	100/14	-
			bS	690	-	620	-	-	100/52
				1782	-	1670	-		
5(P) WELLAIR CONCEPTS INC., P.O. BOX 339, EAR FALLS, ONTARIO, P0V 1T0									
[Gordon Hicks. Tel. (807) 222-2325]									
[SLF-100%]									
1650 (Fpc)	-	-	jP	5498	-	2779	-	100/14	-
			bS	555	-	500	-	32/22	68/52
				6053	-	3279	-		

(cont'd)

Table 4. Container production nurseries by region (cont'd).

Greenhouse capacity (m^2) and style				Seedling production ('000 cavities sown)		Seedling production ('000 shippable seedlings)		Crop schedule	
Heated houses	Unheated houses	Shelter-houses		Heated houses	Unheated houses	Heated houses	Unheated houses	Current crop	Over-wintered
NORTH CENTRAL REGION									
6(C) THUNDER BAY FOREST STATION, ONTARIO MINISTRY OF NATURAL RESOURCES, RR#1, THUNDER BAY, ONTARIO, P7C 4T9									
[Bob Klapprat. Tel. (807) 939-2561]									
[SLP-90%; MP1-10%]									
1500 (Fpc)	-	-	jP	1600	-	1400	-	100/16	-
			bS	1600	-	1400	-	-	100/52
				3200	-	2800	-		
7(P) A & R GREENHOUSES LTD, RR#1, HURKETT, ONTARIO, P0T 1K0									
[Frank Rauer and John Asperjan. Tel. (807) 857-2471/857-2286]									
[PP4-100%]									
2007 (Fpc)	-	-	jP	1250	-	994	-	100/16	-
			bS	1380	-	1180	-	-	100/52
				2630	-	2174	-		
8(P) CREEKSIDE NURSERY, RR#11, THUNDER BAY, ONTARIO, P7B 5E2									
[Dennis Trevisanutto. Tel. (807) 345-3131]									
[PP4-100%]									
3211 (Fpc)	-	-	jP	2250	-	1941	-	100/20	-
			bS	2690	-	2200	-	-	100/52
				4940	-	4141	-		

(cont'd)

Table 4. Container production nurseries by region (cont'd).

Greenhouse capacity (m^2) and style				Seedling production ('000 cavities sown)		Seedling production ('000 shippable seedlings)		Crop schedule	
Heated houses	Unheated houses	Shelter-houses		Heated houses	Unheated houses	Heated houses	Unheated houses	Current crop	Over-wintered
9(P) GRUNDY'S NURSERIES LTD., PASS LAKE, ONTARIO, P0T 2M0									
[Errol Grundy. Tel. (807) 977-2832/977-2690]									
[PP4-100%]									
1605 (Fpc)	-	-	jP	1300	-	1158	-	100/16	-
			bS	1420	-	1250	-	-	100/52
				2720	-	2408	-		
10(P) HILLS GREENHOUSES LTD., OLIVER ROAD, MURILLO, THUNDER BAY, ONTARIO, P0T 2G0									
[Hermann Vanduyn and Ralph Meems. Tel. (807) 935-2626]									
[PP4-100%]									
3612 (Fpc)	-	-	jP	1980	-	1734	-	100/16	-
			bS	4400	-	3905	-	45/20	55/52
				6380	-	5639	-		
11(P) HODWITZ ENTERPRISES LTD., RR#6, THUNDER BAY, ONTARIO, P7C 5N5									
[Jim and Dan Hodwitz. Tel. (807) 939-6027]									
[PP4-100%]									
3612 (Fpc)	-	-	jP	3800	-	3461	-	100/16	-
959 (Fge)			bS	2960	-	2400	-	-	100/52
				6760	-	5861	-		

(cont'd)

Table 4. Container production nurseries by region (cont'd).

Greenhouse capacity (m^2) and style				Seedling production ('000 cavities sown)		Seedling production ('000 shippable seedlings)		Crop schedule	
Heated houses	Unheated houses	Shelter-houses		Heated houses	Unheated houses	Heated houses	Unheated houses	Current crop	Over-wintered
			12(P) JELLIEN NURSERIES ARMSTRONG LTD., P.O. BOX 142, ARMSTRONG, ONTARIO, P0T 1A0						
			[Mr. & Mrs. Ted Neill. Tel. (807) 583-2193]						
			[PP4-100%]						
1605 (Fpc)	-	-	jP	-	-	-	-	-	-
			bS	1340	-	1150	-	-	100/52
				1340	-	1150	-		
NORTHERN REGION									
			13(C) SWASTIKA FOREST STATION, ONTARIO MINISTRY OF NATURAL RESOURCES, P.O. BOX 129, SWASTIKA, ONTARIO, P0K 1T0						
			[Lucien J. Forcier. Tel. (705) 567-3372]						
			[PP3-100%]						
722 (Gfb)	-	-	jP	817	-	672	-	100/11	-
3978 (Fpb)			bS	-	-	-	-	-	-
				817	-	672	-		
			14(P) AIDIE CREEK GARDENS, RR#3, ENGLEHART, ONTARIO, P0J 1H0						
			[Charles Warner. Tel. (705) 544-2474]						
			[PP4-100%]						
4375 (Fpb)	-	-	jP	1020	-	708	-	-	100/52
			bS	2216	-	1796	-	-	100/52
			wS	210	-	129			100/52
				3446	-	2633	-		

(cont'd)

Table 4. Container production nurseries by region (cont'd).

Greenhouse capacity (m^2) and style				Seedling production ('000 cavities sown)		Seedling production ('000 shippable seedlings)		Crop schedule	
Heated houses	Unheated houses	Shelter-houses		Heated houses	Unheated houses	Heated houses	Unheated houses	Current crop	Over-wintered
15(P) BIRCHILL NURSERIES INC., RR#2, COCHRANE, ONTARIO, P0L 1C0									
[J. Russell Skidmore. Tel. (705) 272-6185]									
[PP4-100%]									
2890 (Fpb)	-	-	jP	-	-	-	-	-	-
			bS	2419	-	2100	-	-	100/52
				2419	-	2100	-		
16(P) BLAZECKA'S GREENHOUSE, RR#2, COCHRANE, ONTARIO, P0L 1C0									
[John Blazecka. Tel. (705) 272-3915]									
[PP4-100%]									
1490 (Fpb)	-	-	jP	242	-	174	-	-	100/52
			bS	1008	-	963	-	-	100/52
				1250	-	1137	-		
17(P) ENERGREEN ENTERPRISES INC., P.O. BOX 329, SWASTIKA, ONTARIO, P0K 1T0									
[Gilbert Levangie. Tel. (705) 642-3426]									
[PP4-100%]									
4715 (Gpd)	-	-	jP	6284	-	5418	-	50/14	50/52
			bS	2395	-	2127	-	64/18	36/52
				8679	-	7545	-		

(cont'd)

Table 4. Container production nurseries by region (cont'd).

Greenhouse capacity (m^2) and style				Seedling production ('000 cavities sown)		Seedling production ('000 shippable seedlings)		Crop schedule	
Heated houses	Unheated houses	Shelter-houses		Heated houses	Unheated houses	Heated houses	Unheated houses	Current crop	Over-wintered
18(P) LAFLEUR GARDENS LTD., RR#2, AIRPORT ROAD, TIMMINS, ONTARIO, P4N 7C3									
[Richard Lafleur. Tel. (705) 268-2323]									
[PP4-100%]									
3921 (Gpb/g)	-	-	jP	4811	-	3848	-	43/14	57/52
			bS	3434	-	2805	-	60/20	40/52
				8245	-	6653	-		
19(P) LA MAISON VERTE, LOT 26, CONCESSION 10, GIRARD ROAD, P.O. BOX 1868, HEARST, ONTARIO, P0L 1N0									
[Ms. Michelle Lamy. Tel. (705) 362-7040]									
[PP4-100%]									
1248 (Gpg)	-	-	jP	485	-	465	-	-	100/52
			bS	2093	-	1487	-	62/20	38/52
				2578	-	1952	-		
20(P) LAVA MOUNTAIN LTD., P.O. BOX 10, RAMORE, ONTARIO, P0K 1R0									
[Don Boothe. Tel. (705) 236-4287]									
[PP4-100%]									
2904 (Gge/g)	-	-	jP	-	-	-	-	-	-
			bS	5118	-	4531	-	50/21	50/52
				5118	-	4531	-		

(cont'd)

Table 4. Container production nurseries by region (cont'd).

Greenhouse capacity (m^2) and style				Seedling production ('000 cavities sown)		Seedling production ('000 shippable seedlings)		Crop schedule	
Heated houses	Unheated houses	Shelter-houses		Heated houses	Unheated houses	Heated houses	Unheated houses	Current crop	Over-wintered
21(P) M. KEAN RESOURCES, 624 CEDAR STREET NORTH, TIMMINS, ONTARIO, P4N 6K4									
[Mark Kean. Tel. (705) 264-2048]									
[PP3-83%; PP4-17%]									
302 (Pfb)	-	-	jP	1467	-	888	-	83/12	17/52
1115 (Gpg)			bS	-	-	-	-	-	-
				1467	-	888	-		
22-23(P) MILLSON FORESTRY SERVICE, 1782 DALTON ROAD, RR#1, TIMMINS, ONTARIO, P4N 7C2									
[David Millson. Tel. (705) 264-3426]									
[PP4-100%]									
22(P) *Val Gagne site*									
1605 (Pfh)	-	-	jP	852	-	718	-	33/15	67/52
			bS	1420	-	1220	-	60/21	40/52
				2272	-	1938	-		
23(P) *Timmins site*									
302 (Pfb)	-	-	jP	256	-	251	-	100/15	-
			bS	-	-	-	-	-	-
				256	-	251	-		

(cont'd)

Table 4. Container production nurseries by region (cont'd).

Greenhouse capacity (m^2) and style				Seedling production ('000 cavities sown)		Seedling production ('000 shippable seedlings)		Crop schedule	
Heated houses	Unheated houses	Shelter-houses		Heated houses	Unheated houses	Heated houses	Unheated houses	Current crop	Over-wintered
			24(P) NORTHERN GREENHOUSE FARMS LTD., P.O. BOX 1160, TIMMINS, ONTARIO, P4N 5X4						
			[R.J. Deluce. Tel. (705) 264-9521]						
			[PP4-100%]						
2657 (Gph)	-	-	jP	1610	-	700	-	-	100/52
			bS	2869	-	2617	-	78/21	22/52
				4479	-	3317	-		
			25(P) NORTH GRO DEVELOPMENT LTD., 75 GOVERNMENT ROAD WEST, KIRKLAND LAKE, ONTARIO, P2N 2E6						
			[Abe Aidelbaum. Tel. (705) 567-5646]						
			[PP4-100%]						
2890 (Fpb)	-	-	jP	-	-	-	-	-	-
			bS	1856	-	1669	-	-	100/54
			wS	580	-	376	-	-	100/54
				2436	-	2045	-		

(cont'd)

Table 4. Container production nurseries by region (cont'd).

Greenhouse capacity (m^2) and style				Seedling production ('000 cavities sown)		Seedling production ('000 shippable seedlings)		Crop schedule	
Heated houses	Unheated houses	Shelter-houses		Heated houses	Unheated houses	Heated houses	Unheated houses	Current crop	Over-wintered
NORTHEASTERN REGION									
26(C) THESSALON TREE NURSERY, ONTARIO MINISTRY OF NATURAL RESOURCES, P.O. BOX 310, THESSALON, ONTARIO, P0R 1L0									
[Glenn Connell. Tel. (705) 842-3914]									
[PP4-91%; LT-9%]									
4491 (Fpe/f)	-	-	jP	4289	-	3167	-	70/14	30/48
			rP	594	-	462	-	-	100/49
			wP	180	-	144	-	-	100/49
			bS	287	-	272	-	-	100/48
			OC	12	-	6	-		
				5362	-	4051	-		
27(P) AQUANORTH INC., P.O. BOX 390, NORTH BAY, ONTARIO, P1B 8R9									
[Gerry Liddle. Tel. (705) 472-4709]									
[PP4-100%]									
1908 (Gpf)	-	-	jP	1988	-	1833	-	67/14	33/48
			rP	550	-	528	-	-	100/48
			wP	466	-	433	-	35/14	65/48
			bS	-	-	-	-		
				3004	-	2794	-		

(cont'd)

Table 4. Container production nurseries by region (cont'd).

Greenhouse capacity (m^2) and style				Seedling production ('000 cavities sown)		Seedling production ('000 shippable seedlings)		Crop schedule	
Heated houses	Unheated houses	Shelter-houses		Heated houses	Unheated houses	Heated houses	Unheated houses	Current crop	Over-wintered
			28(P) [BOLDUC NURSERY] RR#1, BRUCE MINES, ONTARIO, P0R 1C0						
			[Amy-Jean Bolduc. Tel. (705) 785-3788]						
			[PP4-100%]						
536 (Fpb)	-	-	jP	696	-	690	-	35/10	65/48
			bS	-	-	-	-	-	-
				696	-	690	-		
			29(P) LARCHWOOD GREENHOUSES, 2150 HWY 144, RR#3, CHELMSFORD, ONTARIO, P0M 1L0						
			[Charles Sanders. Tel. (705) 855-4380/055-3316]						
			[PP4-100%]						
536 (Fpa)	-	-	jP	680	-	673	-	35/14	65/48
			bS	-	-	-	-	-	-
				680	-	673	-		
EASTERN REGION									
			30(C) G. HOWARD FERGUSON FOREST STATION, ONTARIO MINISTRY OF NATURAL RESOURCES, RR#4, KEMPTVILLE, ONTARIO, K0G 1J0						
			[A.J. Campbell. Tel. (613) 258-3413]						
			[MP1-100%]						
900 (Fpa)	300 (Pf)	1200	jP	40	-	32	-	100/16	-
			wP	12	400	12	350	3/20	97/48
			bS	45	-	34	-	100/20	-
			wS	22	-	22	-	100/20	-
			L	6	-	6	-	100/16	-
			OC	40	-	39	-		
				165	400	145	350		

(cont'd)

Table 4. Container production nurseries by region (concl.).

Greenhouse capacity (m^2) and style				Seedling production ('000 cavities sown)		Seedling production ('000 shippable seedlings)		Crop schedule	
Heated houses	Unheated houses	Shelter-houses		Heated houses	Unheated houses	Heated houses	Unheated houses	Current crop	Over-wintered
EASTERN REGION									
31(P) WALSH NURSERIES LTD., KEMPTVILLE, ONTARIO, K0G 1J0									
[Irvin Walsh. Tel. (613) 258-3053]									
[MP1-100%]									
740 (Fpe/f)	280 (Fp)	-	jP	-	-	-	-	-	-
			wP	300	-	284	-	100/18	-
			bS	-	-	-	-	-	-
			L	200	-	198	-	100/16	-
				500	-	482	-		
CENTRAL REGION									
32(C) ORONO PROVINCIAL FOREST STATION, ONTARIO MINISTRY OF NATURAL RESOURCES, P.O. BOX 119, ORONO, ONTARIO, L0B 1M0									
[Glenn R. McLeod. Tel. (416) 983-9147]									
[MP1-100%]									
1663 (Ffq/Fpc)	-	4830	jP	-	-	-	-	-	-
			sP	55	-	50	-	-	100/-
			bS	-	-	-	-	-	-
			L	13	-	12	-	-	100/-
				68	-	62	-		

Table 5. Summary of planting stock production, all sources, for calendar year 1984 by region and type ('000 shippable seedlings).

Region	Containerized		Bare-root		Accel. transplants		Cuttings		Total production
	Number	% of total	Number	% of total	Number	% of total	Number	% of total	
Northwestern	12 376	71.3	3 739	21.5	1 241	7.2	-	-	17 356
North Central	24 173	81.3	5 569	18.7	-	-	-	-	29 742
Northern	35 662	63.0	18 980[a]	33.5	1 949	3.4	57	0.1	56 648
Northeastern	8 208	84.8	1 471	15.2	-	-	-	-	9 679
Eastern	977	9.6	7 752	76.3	27	0.3	1 399	13.8	10 155
Central	62	0.5	12 915[b]	98.4	65	0.5	79	0.6	13 121
Southwestern	-	-	6 059	100.0	-	-	-	-	6 059
	81 458	57.1	56 485	39.5	3 282	2.3	1 535	1.1	142 760

[a]Includes Swastika, Chapleau and Goyama nurseries (OMNR)
[b]Includes Orono and Midhurst nurseries (OMNR)

Table 6. Summary of planting stock production for calendar year 1984 by region, type and source ('000 shippable seedlings).

Region	Containerized		Bare-root		Accel. transplants		Cuttings		Total production
	OMNR	Private	OMNR	Private	OMNR	Private	OMNR	Private	
Northwestern	2 998	9 378	3 739	-	1 241	-	-	-	17 356
North Central	2 800	21 373	5 569	-	-	-	-	-	29 742
Northern	672	34 990	18 980[a]	-	1 949	-	57	-	56 648
Northeastern	4 051	4 157	1 471	-	-	-	-	-	9 679
Eastern	495	482	7 752	-	27	-	1 399	-	10 155
Central	62	-	12 915[b]	-	65	-	79	-	13 121
Southwestern	-	-	6 059	-	-	-	-	-	6 059
	11 078	70 380	56 485	-	3 282	-	1 535	-	142 760

[a]Includes Swastika, Chapleau and Gogama nurseries (OMNR)
[b]Includes Orono and Midhurst nurseries (OMNR)

Table 7. Summary of planting stock production, all sources, for calendar year 1984 by region, type and species ('000 shippable seedlings).

Region	Stock type	Species								Total production
		White spruce	Black spruce	Jack pine	Red pine	White pine	Larch	Other conifers	Hard-woods	
Northwestern	Containerized	-	3 399	8 977	-	-	-	-	-	12 376
	Bare-root	2 190	1 308	151	90	-	-	-	-	3 739
	Accel. transplants	107	824	-	310	-	-	-	-	1 241
	Cuttings	-	-	-	-	-	-	-	-	-
North Central	Containerized	-	13 485	10 688	-	-	-	-	-	24 173
	Bare-root	1 875	1 841	1 523	318	-	-	9	3	5 569
	Accel. transplants	-	-	-	-	-	-	-	-	-
	Cuttings	-	-	-	-	-	-	-	-	-
Northern	Containerized	505	21 315	13 842	-	-	-	-	-	35 662
	Bare-root	4 387	6 001	8 592	-	-	-	-	-	18 980
	Accel. transplants	-	1 949	-	-	-	-	-	-	1 949
	Cuttings	-	57	-	-	-	-	-	-	57
Northeastern	Containerized	-	272	6 363	990	577	-	6	-	8 208
	Bare-root	-	-	1 029	428	14	-	-	-	1 471
	Accel. transplants	-	-	-	-	-	-	-	-	-
	Cuttings	-	-	-	-	-	-	-	-	-
Eastern	Containerized	22	34	32	-	646	204	39	-	977
	Bare-root	461	-	1 153	187	4 453	149	926	423	7 752
	Accel. transplants	-	-	-	-	-	-	27	-	27
	Cuttings	-	-	-	-	-	-	-	1 399	1 399
Central	Containerized	-	-	-	-	-	12	50	-	62
	Bare-root	2 877	14	153	4 442	2 418	4	2 419	588	12 915
	Accel. transplants	65	-	-	-	-	-	-	-	65
	Cuttings	18	51	-	-	-	10	-	-	79
Southwestern	Containerized	-	-	-	-	-	-	-	-	-
	Bare-root	426	-	-	139	2 591	38	1 896	969	6 059
	Accel. transplants	-	-	-	-	-	-	-	-	-
	Cuttings	-	-	-	-	-	-	-	-	-
		12 933	50 550	52 503	6 904	10 699	417	5 372	3 382	142 760

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01 December, 1985